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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/649,272	08/28/2000	Peter C. Simpson	18062L-000110	6757

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EXAMINER

BROWN, JENNINE M

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 02/07/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/649,272

Applicant(s)

SIMPSON ET AL.

Examiner

Jennine M. Brown

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Sequence Disclosures

Applicants sequence listing has been entered therefore the instant Application now complies with the Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures (37 CFR 1.821 through 1.825).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 recites the limitation "collinear" in line 2 of claim 2. There is insufficient antecedent basis for this limitation in the claim. There is no support for this term in relation to the two legs in the specification or in reference to any of the drawings.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Dubrow, et al. (US 5976336).

Figures 2a, 2b, 3 and 4 show sequentially loading a multiplexed capillary array electrophoresis apparatus. Dubrow, et al. teach a multiplexed capillary array electrophoresis apparatus and method having multiplexed reservoirs with anodes/cathodes, waste and injection areas connected together such that multiple channels cross one another to separate sample electrophoretically (col. 1, l. 50 – col. 22, l. 15).

Examples 1 and 2 teach a method of running samples sequentially on a multiplexed capillary array electrophoresis apparatus (col. 12, l. 33 – col. 14, l. 22).

Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Chow, et al. (US 5989402).

Chow, et al. illustrate in Figure 6, a capillary array electrophoresis plate having an array of ports used for injection, waste, and sample preparation (606) connected by analysis and separation channels (604a-d) which are aligned with electrodes (620) to provide voltage and/or current. (col. 4, l. 35-40; col. 10, l. 35-48; col. 12, l. 8-11; col. 15, l. 8-33, 44-53, 60-67; col. 16, l. 9-19; especially col. 17, l. 42 – col. 18, l. 17).

Double Patenting

Claims 1-7 and 10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 4-8, 10-13, 15-17, 19-22, 24, 27, 29, 39 of U.S. Patent No. 6,143,152. Although the conflicting claims are not identical, they are not patentably distinct from each other because both claim a multiplexed capillary array electrophoresis plate having a plurality of separation channels having a plurality of anodes and cathodes, injection channels, waste channels that are collinear with one another. The claims of this application appear to be encompassed by the claims of US 6143152.

Response to Arguments

1. 102(e) re: Simpson, et al. (US 6143152)

Examiner has withdrawn the 102(e) rejection because it is not to "another" and therefore improper.

2. 102(e) re: Dubrow, et al. (US 5976336)

In response to Applicant's argument that the references fail to show certain features of Applicant's invention, it is noted that the features upon which Applicant has pointed out have been interpreted differently than was cited in the reference or by the Examiner, specifically pertaining to claims 1-14, when Examiner refers to Figures 3 and 4, all injection/waste points can be shown by the circles (the names of the port can be changed based on the application or upon rotation of the chip in a clockwise or counter clockwise manner) and all legs are determined by the lines connecting each of the

circles. Some of these lines are perpendicular to each other and others are collinear with one another (In Figure 3, legs 362, 304 and 370 are collinear; 380, 304 and 382 are another set of collinear legs; 380, 348, 350, 352, 360, 354, 362 and 312 are another set of collinear legs; 382, 372, 314, 376, 368, 370, 312 are another set of collinear legs). The injection and separation legs would be perpendicular to each other and parallel injection ports would be collinear to one another. Each of these injection/waste points cross at one or more points giving multiple injection sites into the apparatus and multiple waste sites to extract waste from the apparatus using a multiplexed array. The method details sequentially loading samples from different reservoirs and separating them, which was stated previously and is specified in the reference Examiner applied above. Therefore, rejections are maintained.

Examiner also cites for Applicant's reference, US 6475441 to illustrate that reservoirs may be labeled as reservoirs or waste depending upon which direction and what channel one wants to move the sample. Figures 5A-E show movement and separation of a sample in multiply branched channels. It is possible to switch polarity of an electrode with a controller and it is obvious that you can switch the orientation or the name of the channels and provide either separation or sample introduction. Naming of these is arbitrary.

3. Obviousness-type Double Patenting (US 6143152)

Examiner maintains obviousness-type double patenting rejections because amendments have not substantially changed the apparatus or methods claimed by Applicants. Examiner anticipates Applicants filing of the terminal disclaimer.

Prior Art of Record

Examiner also cites for Applicant's reference, US 6475441 to illustrate that reservoirs may be labeled as reservoirs or waste depending upon which direction and what channel one wants to move the sample. Figures 5A-E show movement and separation of a sample in multiply branched channels. It is possible to switch polarity of an electrode with a controller and it is obvious that you can switch the orientation or the name of the channels and provide either separation or sample introduction. Naming of these is arbitrary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennine M. Brown whose telephone number is (703) 305-0435. The examiner can normally be reached on M-F 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on (703) 308-3823. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 879-9310 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

jmb
February 4, 2003



Mark L. Bell
Supervisory Patent Examiner
Technology Center 1700